

## PATENT ABSTRACTS OF JAPAN

DEC 19 2006

(11)Publication number : 2005-124198  
 (43)Date of publication of application : 12.05.2005

(51)Int.Cl. H03M 13/01  
 006F 11/00  
 H04L 1/00

(21)Application number : 2004-298490 (71)Applicant : HEWLETT-PACKARD DEVELOPMENT CO LP

(22)Date of filing : 13.10.2004

(72)Inventor : WEISSMAN ITSCHAK  
 ORDENTLICH ERIK  
 SEROUSSI GADIEL  
 WEINBERGER MARCELO  
 VERDU SERGIO

(30)Priority

Priority number : 2003 688520 Priority date : 17.10.2003 Priority country : US

**(54) METHOD FOR CORRECTING NOISE ERROR IN DIGITAL SIGNAL**

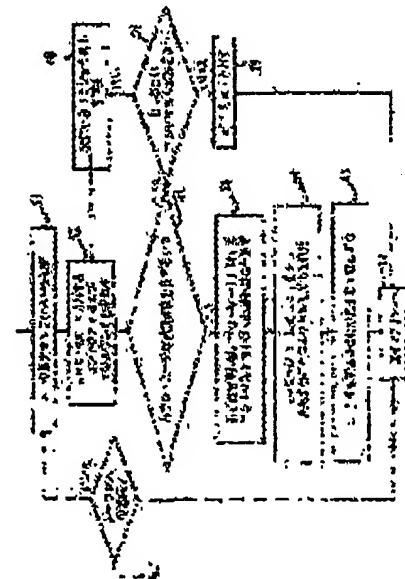
**(57)Abstract:**

**PROBLEM TO BE SOLVED:** To provide an apparatus and method for generating a processed digital signal with less signal damage than a received digital signal.

**SOLUTION:** The apparatus and method is disclosed for processing a received signal [22] damaged by a channel [20] to generate a processed signal [23] with less signal damage than the received signal [22]. An apparatus [10] stores the received signal [22].

information for designating a probability wherein the symbol of a value I is converted into the symbol of a value J by the channel [20], and information for designating a signal deterioration function for measuring signal deterioration that occurs when the symbol of the value I is replaced with the symbol of the value J. A controller [11] replaces each symbol of the value I with the symbol of the value J in context [24] of the symbol in the received signal [22].

This value J minimizes all the signal deterioration of the processed signal [23] relating to a signal [21] in which there is no basic noise, estimated via the statistics observed in the context [24].



**LEGAL STATUS**

[Date of request for examination] 13.10.2004

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

DEC. 19. 2006 4:52PM HP LEGAL  
[Date of final disposal for application]  
[Patent number]  
[Date of registration]  
[Number of appeal against examiner's decision of  
rejection]  
[Date of requesting appeal against examiner's  
decision of rejection]  
[Date of extinction of right]

NO. 3199 P. 4